

What is claimed is:

1. An electrolytic plating method,
comprising:

5 using a wiring board as one pole, and an insoluble
electrode as the other pole; and

performing electrolytic plating by applying a
forward/reverse current with the use of a metal plating
solution which includes iron ions by 0. 1 gram/liter
10 or more, so that microvia holes on the wiring board are
filled up with metal plating.

2. The electrolytic plating method according
to claim 1, wherein

15 the metal plating solution is stirred to flow in
parallel to a surface to be plated of the wiring board.

3. The electrolytic plating method according
to claim 1, wherein

20 the insoluble electrode is configured by a
multi-aperture electrode.

4. The electrolytic plating method according
to claim 1, wherein:

25 the insoluble electrode is configured by a

multi-aperture metal mesh; and

the metal plating solution is implemented by a
copper plating solution which includes iron ions by 0.1
gram/liter or more, and performs pulse reverse
5 electrolytic plating.

5. The electrolytic plating method according
to claim 1, wherein:

the metal plating solution is a copper plating
10 solution; and

the wiring board is a printed-circuit board.

6. The electrolytic plating method according
to claim 1, further comprising:

15 arranging a plating bath which accommodates the
insoluble electrode and the wiring board, and a
copper dissolved bath which supplies copper ions to said
plating bath; and

circulating a solution within the copper
20 dissolved bath and the plating solution within the
plating bath.

7. An electrolytic plating device for a wiring
board, comprising:

25 an insoluble electrode which is an electrode as

opposed to a wiring board;

a metal plating solution including iron ions by
0.1 gram/liter or more; and

a power source for performing electrolytic
5 plating by applying a forward/reverse current between
the wiring board and said insoluble electrode.

8. The electrolytic plating device according
to claim 7, wherein

10 microvia holes formed on a printed-circuit board
are filled up with pulse reverse electrolytic plating.

9. The electrolytic plating device according
to claim 7, further comprising

15 a stirring unit stirring said metal plating
solution to make said metal plating solution flow in
parallel to a surface to be plated of the wiring board.

10. The electrolytic plating device according
20 to claim 9, further comprising:

a plating bath accommodating the insoluble
electrode and the wiring board; and

a copper dissolved bath supplying copper ions to
said plating bath, wherein

25 said stirring unit circulates a solution within

the copper dissolved bath and the plating solution within the plating bath.

11. The electrolytic plating device according
5 to claim 7, wherein:

said insoluble electrode is implemented by a multi-aperture electrode; and

said plating solution is implemented by a copper plating solution.